

## Section 5

# AIRPORT IMPACT ELEMENT

### 5.1 Executive Summary

The close proximity of Minneapolis-St. Paul International Airport (MSP) creates a variety of positive and negative impacts on Bloomington. Throughout history, the growth of cities has been driven by proximity to transportation infrastructure. Sea ports, river ports, railroads and highways have taken their turn driving urban growth. In today's global economy, international hub airports are increasingly becoming economic drivers.

MSP is already instrumental in the success of many Bloomington businesses including hotels, remote airport parking facilities, offices, some residential projects and the Mall of America. The airport is one of the region's largest employers and many airport employees call Bloomington home. Bloomington seeks to capitalize upon proximity to MSP while recognizing that increasing aviation costs may reduce the importance of airports in the future.

While MSP is a major economic engine for Bloomington, its proximity brings with it noise, land use restrictions and height limits. In recent years, Bloomington lost several businesses and over 160 living units to the construction of MSP's new north-south runway. Still, all things considered, having MSP as a close neighbor is a *net positive* for Bloomington. The City supports retaining MSP as the region's one major passenger and cargo airport. At the same time, the City will continue to work actively to reduce and contain the adverse impacts of MSP on Bloomington.

### Reliever Airports

While MSP has been designed primarily for regularly scheduled commercial flights, there are ten other airports in the metropolitan airport system designed to serve personal and business general aviation needs and to relieve MSP of general aviation traffic. The closest reliever airport to Bloomington is Flying Cloud in Eden Prairie. Along with Airlake Airport in Lakeville, Flying Cloud serves the travel needs of Bloomington businesses and residents that cannot be met by scheduled airline service. Although air traffic departing and arriving at Flying Cloud frequently passes over Bloomington, the associated noise impacts on Bloomington are limited. The City supports continued improvements for general aviation needs at the Flying Cloud Airport.



### Future Changes at MSP

Looking forward, several airport related changes have the potential to impact Bloomington, including:

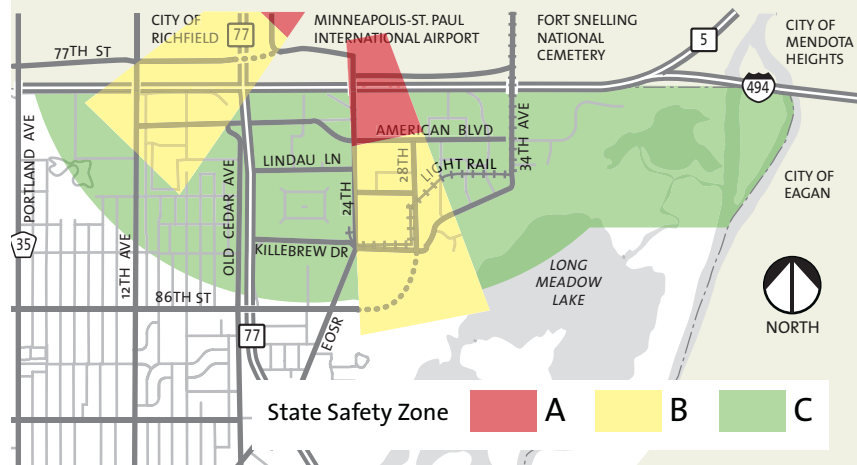
- MSP's forecast continued growth in passengers and flights.
- The merger of MSP's largest airline, Northwest, with Delta Airlines.
- Higher aviation fuel costs.
- The planned major expansion of the Humphrey Terminal and the associated significant increase in traffic volume on 34th Avenue.
- The Metropolitan Airports Commission's sale of several Bloomington development sites acquired during implementation of Runway 17/35.
- The evolution of commercial aircraft fleets toward newer, quieter models.
- Improvements in communications technology that may reduce the need to travel by air.

## 5.2 Safety

### Runway Safety Zones

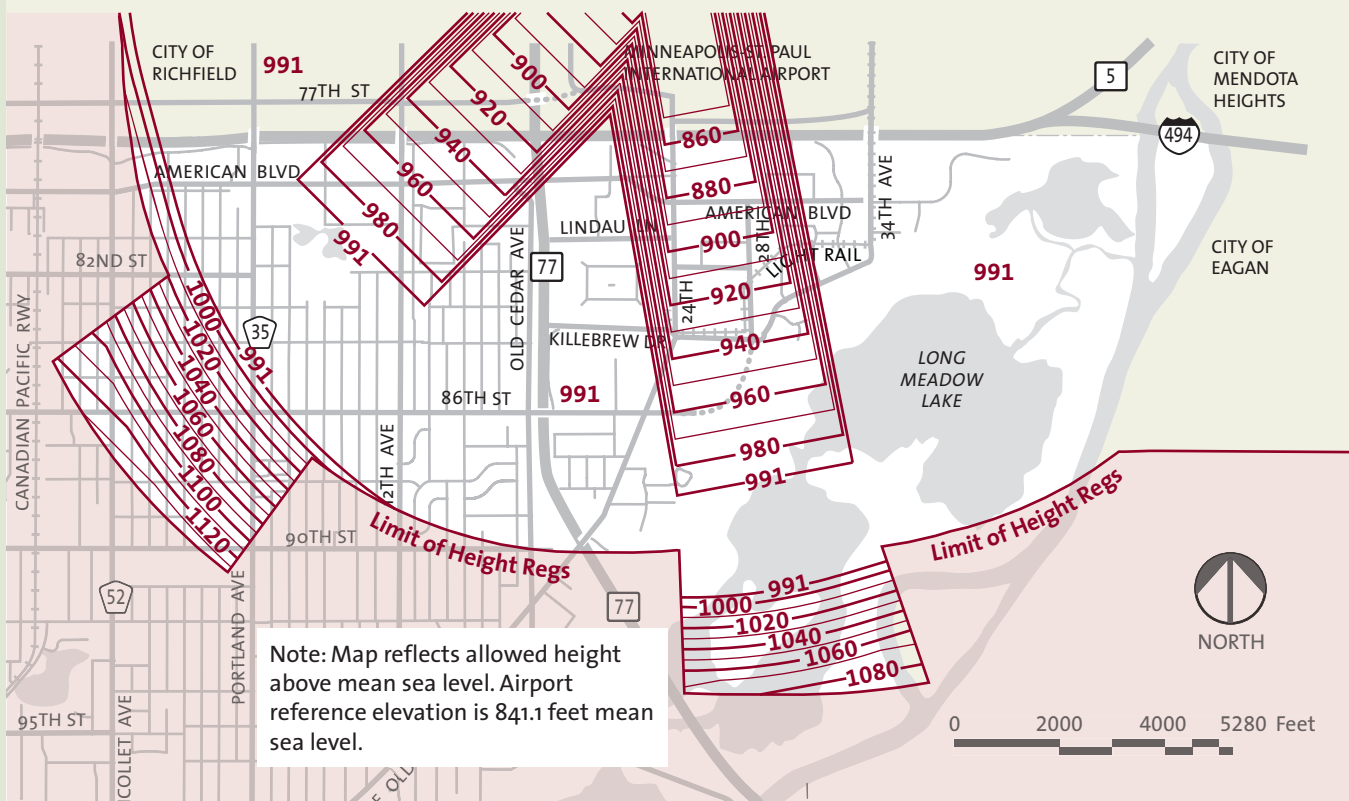
After considerable study and public input, in 2004 the MSP Joint Airport Zoning Board adopted the *MSP International Airport Zoning Ordinance* which includes the safety zones depicted in **Figure 5.1, right**. Safety Zone A corresponds with the Federal Runway Protection Zone and prohibits all uses. Safety Zone B prohibits various types of use and Safety Zone C regulates activities and structures that would interfere with airport communications or with a pilot's view of the airport.

**Figure 5.1 Runway Safety Zones**



Source: Metropolitan Airports Commission.

**Figure 5.2 Structure Height Limits – MSP Airport Zoning**



Source: Metropolitan Airports Commission.

## Height Limits

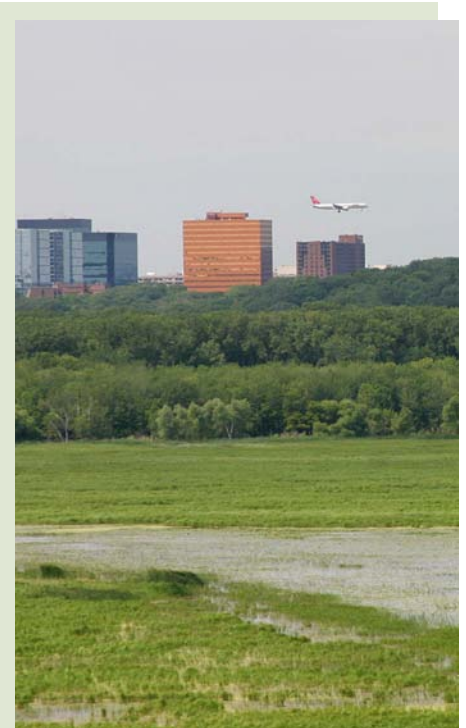
**Figure 5.2**, page 5.2, depicts the height limits of the MSP International Airport Zoning Ordinance. Bloomington has implemented the safety and height restrictions of the

MSP International Airport Zoning Ordinance through adoption of the AR-17 and AR-22 overlay districts and by rezoning parcels.

## 5.3 Noise

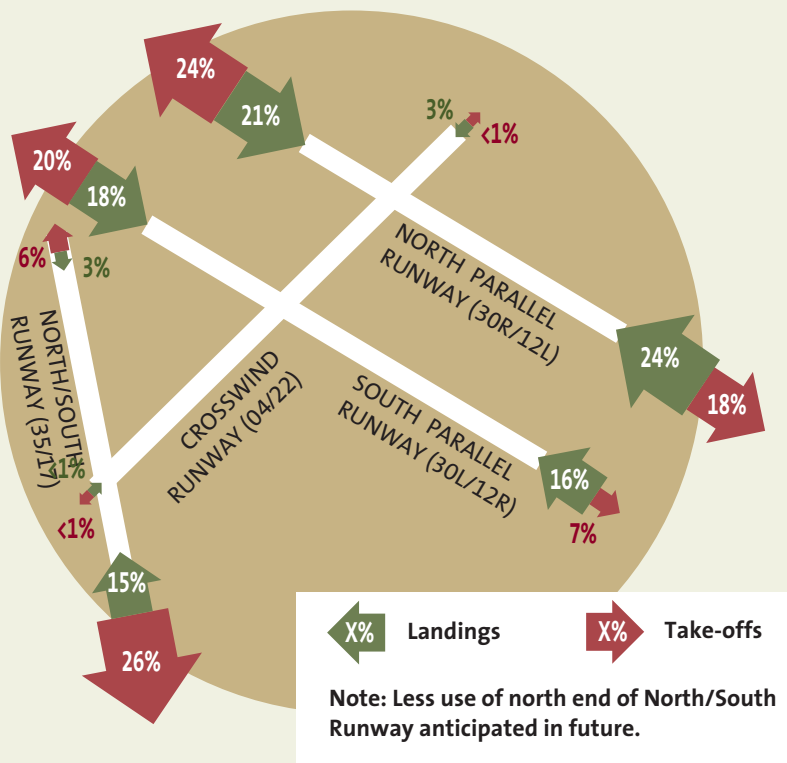
Noise is the most widespread environmental impact associated with the airport and perhaps the most difficult airport-related problem to mitigate. While all of Bloomington is exposed to noise from overhead aircraft, noise levels are most intense in portions of eastern Bloomington near the airport and under flight paths. **Figure 5.3**, below, depicts 2007 runway use at MSP and **Figure 5.4**, next page, depicts the forecast 2005 aircraft noise exposure levels used in MAC's noise mitigation program.

Noise impacts at DNL 75 and above are considered severe. Residential, most public and quasi-public, and hotel uses are incompatible with these noise



Airplanes fly low over the Airport South District and the Minnesota River bluffs, directly south of the MSP Airport.

**Figure 5.3 MSP Runway Use, 2007**



Source: Metropolitan Airports Commission, Annual Noise Contour Analysis - 2007, Table 3.3.

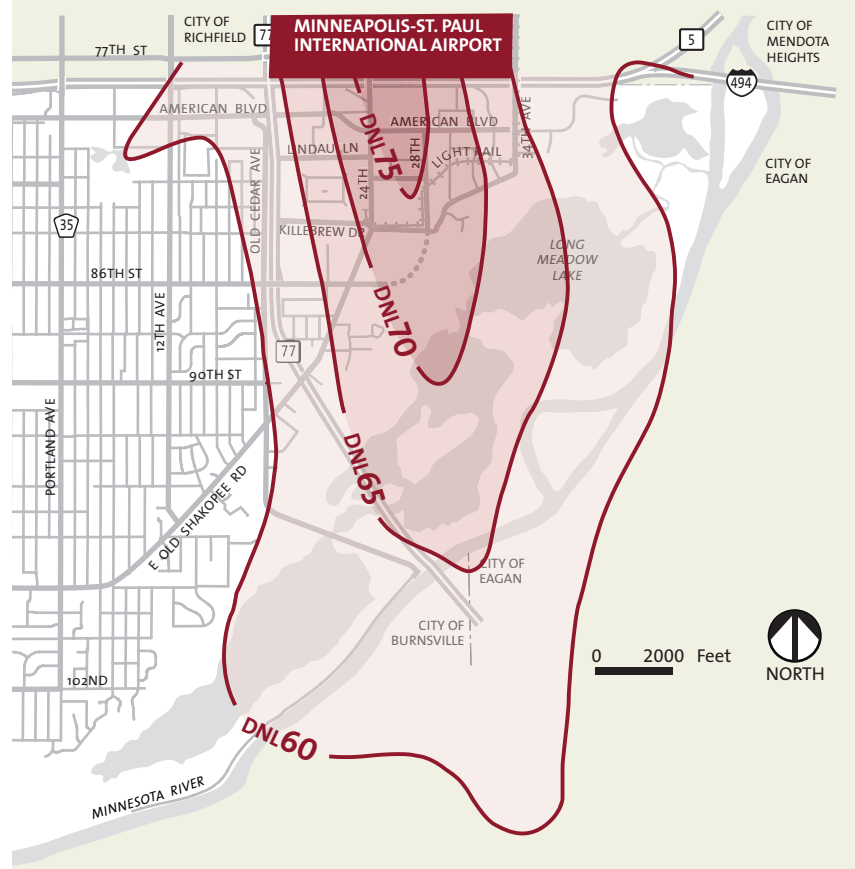


Window replacement is one technique used to mitigate aircraft noise.

levels. Other non-industrial land uses are appropriate only when adequately insulated. Noise impacts at DNL 70-75 are sustained and can routinely interfere with speech and sleep. Residential land uses and most public and quasi-public uses are incompatible with these noise levels. Other uses may require insulation depending on the nature of the use. Noise impacts at DNL 65 to DNL 70 are significant while noise impacts at

DNL 60 to DNL 65 are considered moderate. Based on a 2007 lawsuit settlement, The Metropolitan Airports Commission will be offering noise mitigation measures by 2012 to all residences at or above DNL 60. Depending on noise exposure levels, the measures range from adding air conditioning to window replacement and wall and attic insulation.

Figure 5.4 Aircraft Noise Exposure, 2005



Source: Environmental Assessment for the Implementation of a Departure Procedure from Runway 17.

## 5.4 Goals, Strategies, Actions

**Goal 1** Support continued improvements to preserve MSP as a first class international hub airport to best capitalize on its proximity to Bloomington.

### Strategy 1.1

Support continued use of MSP as the region's one major passenger and cargo airport.

### Strategy 1.2

Support improvements to keep MSP operating safely and efficiently.

### Strategy 1.3

Encourage continued improvements at Flying Cloud Airport for general aviation needs and as a method for relieving general aviation traffic from MSP.

### Strategy 1.4

Work with the Metropolitan Airports Commission on joint planning efforts.

- Cooperate with the Metropolitan Airports Commission when preparing the Airport South District Plan.
- Request Bloomington involvement in MSP master planning efforts.
- Assist the MAC with sale or development of several properties in Bloomington it purchased as part of the 17/35 runway mitigation project.

### Strategy 1.5

Support the construction of additional parking at MSP airport as a way to eliminate the need for remote airport parking facilities.

### Strategy 1.6

Advocate for transportation improvements as needed to support growth at MSP.

- Support regionally funded improvements to 34th Avenue and to the I-494/34th Avenue interchange to accommodate anticipated future traffic levels once the Humphrey Terminal is expanded.
- Integrate off-site remote airport parking with transit to reduce the number of vehicle trips at and near the airport.

### Strategy 1.7

**Ensure new development does not inappropriately interfere with airport operations.**

- Enforce the Minneapolis-St. Paul International Airport Zoning Ordinance.
- When required under federal law, development must submit a Notice of Proposed Construction or Alteration (FAA Form 7460) to the Federal Aviation Administration.

## Goal 2 Reduce and contain MSP's adverse impacts on Bloomington.

### Strategy 2.1

**Support aggressive mitigation of aircraft noise impacts to reduce the airport's nuisance effect on residents around the airport.**

- Advocate for strategies to reduce aircraft noise at its source as an efficient method of minimizing aircraft noise impacts.
- Advocate to complete noise mitigation programs for all residences at DNL 60 or above by 2012.
- Advocate for runway use strategies that minimize noise exposure to Bloomington homes.
- Prepare and adopt into the City Code aircraft noise insulation standards for new development in areas exposed to high levels of aircraft noise.
- Encourage appropriate noise mitigation in conjunction with all future airport-related changes that negatively impact noise levels.

### Strategy 2.2

**Continue to participate actively in airport-related advisory boards and committees.**